

Title (en)
ILLUMINATION DEVICE

Title (de)
BELEUCHTUNGSVORRICHTUNG

Title (fr)
DISPOSITIF D'ÉCLAIRAGE

Publication
EP 3130962 B1 20191016 (EN)

Application
EP 15769453 A 20150326

Priority
• JP 2014066765 A 20140327
• JP 2015059420 W 20150326

Abstract (en)
[origin: EP3130962A1] An illumination device (40) includes an irradiation device (70), a diffusing element (50), a first lens array (55), a second lens array (60) and a deflecting element (65), which are arranged in this order along the light path. Diffused light that has entered a particular region on the diffusing element and has been diffused by the diffusing element, and diffused light that has entered a region, which differs from the particular region, on the diffusing element and has been diffused by the diffusing element, travel to regions which at least partly overlap each other. The diffusion angle (α) of diffused light exiting the diffusing element is not more than the acceptable angle (β) formed between two line segments LS extending from the principal point (61a) of a second unit lens of the second lens array (60) to both ends of a first unit lens of the first lens array (55).

IPC 8 full level
G02B 5/02 (2006.01); **G02B 26/10** (2006.01); **G02B 27/09** (2006.01); **G02B 27/48** (2006.01); **G03B 21/20** (2006.01); **H04N 9/31** (2006.01)

CPC (source: EP US)
G02B 3/00 (2013.01 - US); **G02B 5/0215** (2013.01 - EP US); **G02B 5/0278** (2013.01 - EP US); **G02B 13/0095** (2013.01 - US); **G02B 13/16** (2013.01 - US); **G02B 19/00** (2013.01 - US); **G02B 26/101** (2013.01 - EP US); **G02B 26/105** (2013.01 - US); **G02B 27/0905** (2013.01 - EP US); **G02B 27/0933** (2013.01 - EP US); **G02B 27/0961** (2013.01 - EP US); **G02B 27/48** (2013.01 - EP US); **G03B 21/2033** (2013.01 - EP US); **G03B 21/2066** (2013.01 - EP US); **G03B 21/208** (2013.01 - EP US); **H04N 9/3129** (2013.01 - US); **H04N 9/3152** (2013.01 - EP US); **H04N 9/3161** (2013.01 - EP US); **H04N 9/3164** (2013.01 - US); **G02B 27/0994** (2013.01 - EP US)

Cited by
CN114002900A

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 3130962 A1 20170215; **EP 3130962 A4 20170830**; **EP 3130962 B1 20191016**; CN 105474090 A 20160406; CN 105474090 B 20171208; JP 2015191043 A 20151102; JP 6252298 B2 20171227; TW 201544851 A 20151201; TW I646357 B 20190101; US 10175497 B2 20190108; US 2017108704 A1 20170420; WO 2015147185 A1 20151001

DOCDB simple family (application)
EP 15769453 A 20150326; CN 201580001569 A 20150326; JP 2014066765 A 20140327; JP 2015059420 W 20150326; TW 104110065 A 20150327; US 201515129095 A 20150326